

# Contradictions and Asides: A Social Critique of the Internet

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Less than 30 years ago the Internet (or more exactly the ARPANet) consisted of four computers hooked together (Wiggins, 1995). Today, the Internet is a worldwide techno-wonder comprised of approximately 37 million users in the United States (or 17% of the entire adult North American population) and roughly 72,600,000 million users altogether. One hundred and seventy-seven countries are connected to the Net (Cipoletti, 1997; Graphic, Visualization, & Usability's (GVU) Center, 1997; Research Spectrum, 1997).

Even before the Net existed, McLuhan and Fiore (1967) foresaw a planet on the verge of being united by vast telecommunication systems, brought together by universal signage, and simultaneous translations that would enable all of us to talk to, if not relate to, the whole world. Their expectations were enormous, and most people couldn't foresee what McLuhan & Fiore envisioned. Today, the Internet is a given; now people assume the Net will have a profound effect on our culture and permeate the fabric of an ordinary day—much like televisions, radios, and telephones. Already, global information is available in seconds, an abundance of business opportunities exist, and much of the preliminary infrastructure to make the Net accessible is in place (at least in privileged economies).

While the arrival of the Internet and its graphical subset, the World Wide Web (WWW), represents the start of a massive change in communications systems, this new communication venue has also been touted as a social panacea. According to media claims, the WWW offers knowledge, personal liberation, pleasure, and empowerment. Minimally, "the information superhighway will serve as a pipeline through which nearly every form of communication conceivably will pass" (Stuart, 1995, p. 73). Maximally, this technology brings "new possibilities for individual pleasure and freedom as well as destruction and enslavement" (Kellner, 1995, p. 315).

Behind these huge hopes, big fears, and vague promises lies a more complicated set of social tensions. This article explores those tensions and the inherent contradictions the Net engenders; this article offers a social policy critique of the Net's entrance into people's lives.

## Analog vs. Digital Realities

Although the word *cyberspace* has been easily accepted into our everyday language,

many of us are not sure what it is we "experience" in this electronic space. Technically, there is no space in cyberspace. The Net currently uses an alternative form of communication—digital signals, which also defy distance and time, yet feel familiar. Currently, these signals are transmitted through phone lines—an apt bridge between analog and digital media because it was the first technology to convert events into numbers, yet at the same time remained grounded in a physical medium. Much like telephones, the Net also appears sublime because it appears to "transcend physical limitations of space and time" (Binkley, 1995, p. 432).

Yet, the differences between analog media (television, radio, print) and digital media (computer and the Internet) must be clarified to comprehend this new medium. Analog media melds the message and medium into an "expressive form embodied in a physical material" (Binkley, 1995, p. 427). Analog data has a physical basis in reality. For example, when you photograph someone, there is a real person whom you see; the image of that person is transmitted to a negative; the final print reflects what you actually saw. In effect, real people transmit reality-based information to some medium that results in a concrete outcome.

By contrast, digital media is conceptual—processing and storing symbolic sets of numbers to represent some reality, numbers with no specific geographic location (rather than receiving and preserving material events like analog media). Digital media demands the immediate conversion of all sensations into math-based symbols. While analog media transcribes through physical laws, binary symbols sit under every digital transaction, converting information from its physical properties into abstract mathematical symbols (Binkley, 1995). This level of abstraction is hard to grasp. Digital media contort reality while analog data embrace it. Thus, at the onset, information and images are encoded into math symbols that change everything into false versions of something. This is made explicit with a software such as Photoshop when a green plant becomes blue in seconds.

While the digital realm seems to transcend physical restraints, it establishes an alternative relationship between the user and the medium. We cannot affect what happens on the analog media of the television screen (at least not yet), but we can affect what happens on the digital media of the computer monitor. This

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creates a new relationship between user and medium—one also characterized by a blurred sense of reality since we now have the ability to interact, reconstruct, and delete information in virtual worlds.

To understand the notion of the artificial, one must examine reality. "What is authentically human when the lines between human and technology are being blurred? What is 'reality' if it is capable of such vast simulation?" (Kellner, 1995, p. 315). The Internet has forced us to confront the notion of reality. "[As] people have come to greater acceptance of a kinship between computers and human minds, they have also begun to pursue a new set of boundary questions between computers and human minds, they have also begun to pursue a new set of boundary questions about things and people" (Turkle, 1995, p. 24). Reality, simply put, is bound and validated by material conditions. (Even so, emotions are also considered real.) Since the "artificial is [also] the result of human agency" (Margolin, 1995, p. 350), the artificial imitates many qualities of the natural world, while at the same time constructing a new definition of reality. Thus the real physical world and the unreal conceptual world of the Net may eventually be seen as interchangeable. As Turkle (1995) stated, "We have learned to take things at interface value. We are moving [from a Modernist culture of calculation] toward a culture of simulation in which people are increasingly comfortable with substituting representations of reality for the real" (p. 23).

Just as Baudrillard (1984) pointed out in an interview given over 13 years ago, the media of entertainment, information, and communication provide experience far more intense and involving than the scenes from banal everyday life. Because of media such as television, and now the Internet, what's real ceases to be our guiding point of reference. The boundaries dissolve between the real and simulated and the "simulated becomes the new real" (Margolin, 1995, p. 350). In terms of social progress, it is possible that we will reach a point with little connection to the real—except as it's mitigated through virtual channels.

The digital world is inherently different from the analog reality in certain fundamental ways:

- The digital world stores and processes symbols at the onset.
- Thus, the "logic" of computers is entirely mathematical, abstract, sequential, and emotionally void.
- The process of using digital media is inherently interactive; one must react to a screen

or it becomes static.

- Events are no longer transcribed verbatim; they are converted into a secondary reality—one more fascinating than the actual events or images that it originally captured.

How might these differences in media construction affect our everyday realities on the Net? We believe the Net will influence what we construe as valuable information, isolate us further, influence how we represent ourselves, deepen the class/economic schisms based on cyber access, and create new venues for monopolistic and intrusive capitalistic ventures. We further believe that the rhetoric surrounding the importance of the Net's role in our lives is misleading. While Internet promoters promise utopian social change, in practice, the Net caters to a homogenous, well-educated, monied elite whose interests are intentionally capitalistic in scope. This article elucidates these presumptions.

### Knowledge vs. Facts

Net proponents inevitably suggest that an information revolution is taking shape. Yet the quality of that information is rarely considered. Consider the Web pages themselves: full of facts, promotional spots, and hypertext notes for "more like this." Such facts do not comprise intelligence. In Ray Bradbury's novel, *Fahrenheit 451*, people hate to read, so they applaud firemen who burn their books. One fire captain explains to us (the readers) why people prefer their electronic data this way:

Cram people full of noncombustible data . . . . Chock them so full of "facts" they feel stuffed, but absolutely "brilliant" with information then they'll feel they're thinking, they'll get a sense of motion without moving. (As cited in Swerdlow, 1995, p. 5).

Perhaps people will confuse facts with understanding and vivid imagery for thoughtfulness. As Gertrude Stein cautioned, "Everybody gets so much information all day long that they lose their common sense" (Moore, 1995, p. 12). Stein said this sitting in a salon, eating Alice B. Toklas' brownies, in Paris during the late 1930s. Imagine her reaction to the Net in 1997!

Information overload is surely with us, but is all this information empowering or simply overwhelming? While the WWW purports to offer unlimited information, it is impossible to absorb more than a fraction of that information. Empowerment becomes a myth simply because we lack the time to absorb its offerings. Since all information is seen in the same context, the information may be seen as having the same value blurring what's valuable versus what's worthless information.

Just as Baudrillard posited, people are once again “held hostage by the intoxication of the media” (as cited in Kellner, 1995, p. 25).

### Global Connections vs. Individual Isolation

Another key advantage of the Internet is that cyberspace enables people to “meet” other people. Technology can “act as a prosthetic extension of human powers and communities” (Brook & Boal, 1995, p. vii). Subcultures on the Internet are redefining the way we view social interaction: we chat; we log on; we co-create the very medium we use. Much of the Web’s appeal lies in this notion of dialogue and connection. On the surface, this goal seems salutatory. Yet, truthfully, immersion in the virtual world precludes time for the real one.

Two new phrases have hit the cyberlingo circuit that contain frightening implications. The first word is “skin.” When people are sustained by virtual reality, they have to remember to seek out “skin,” that is, real human contact. (Perhaps Net users could put this key word on a post-it note by their Zip drive.) Skin simply means humans require physical contact with other human beings.

The second phrase that alarms us are Herz’s (1995) words: “the off-line world.” Herz is a self-professed “nethead.” She wrote:

I’ve started using the phrase “off-line world” recently. This disturbs me, because the “off-line world” is what I used to call “real life.” ...It’s not that I’ve given up on Real Life [sic]. ...The on-line and off-line world aren’t staying in their boxes like I thought they would. They’re bleeding together. (pp. 284, 286)

Herz’s (1995) depiction of her life bleeding in/out of reality recalls the problems attendant with watching too much television: we become spectators, even voyeurs, of our own existences. This may not constitute social progress. Real skin, real contact, and an intimate community are known to prolong lives, reduce coronary disease, hasten recovery from injuries, and contribute to overall well-being (Ornish, 1990).

Moreover, virtual communities are burgeoning at a time when real communities are dwindling. Being able to meet people will supposedly interweave a diversity of cultures and bring them closer together. However, this is not likely. On the Internet people are most likely to be attracted to the same spaces that people similar to them are. For example, a person who was never financially able to play golf would, most likely, have no interest in going into a golf chat room. People’s interests are still bound by culture, class, and gender on

the Internet.

George Steiner, a cultural historian teaching at Cambridge University, has warned that civilization is moving towards a “creeping sameness” that threatens local cultures. How did we get here? Steiner believes the five billion dollars a year that people outside of the United States spend on American movies and television offer a prime example of the quest for an insipid homogeneity—a shift described by one New Delhi newspaper as “termites eating away at our traditional values” (Swerdlow, 1995, p. 7).

Perhaps in lieu of intimate contact with others, the Net offers alternative forms of contact?

### Ideal vs. Real Self

Recent postmodern thought offers this concept of the self: the self is implicitly multiple, fragmented and dispersed in relation to the objects and situations it meets in the real world. Baudrillard (1984) described his take on postmodernism this way: “Playing with the pieces [of a broken/false history which has been destroyed]—that is postmodernism” (p. 24). However daunting these worldviews sound, some theorists believe that such fragmentation offers an opportunity for human growth. According to Donna Haraway, who wrote *A Cyborg Manifesto* in 1991, such assembly and disassembly of the self provides a vehicle for positive human development. Because we cannot be nothing (and something at the same time), the self is reinvented in different terms in cyberspace with the perpetual option to be whomever you choose. “The on-line ‘I’ is not a singular, unified, ‘I’, but an I-she-he-it-we-they” (La Farge, 1995, p. 421). One can expose a certain part of herself or himself, create an alternative self, or remain “invisible.” This concept is reminiscent of Foucault’s theory that identity is “elastic” or “fluid” (as cited in Rothstein, 1996, p. 8). Even if an action would be unlikely in the real world, it is only a typed line away on the Internet. This text-only world speaks to the notion of self and imagination in a way that is currently being defined and understood. “We are dwellers on the threshold between real and virtual, unsure of our footing, inventing ourselves as we go along” (Turkle, 1995, p. 10). In cyberspace, the cultural assumption that binds our subjectivity to our physical body is redefined. Radically viewed, one’s identity is mediated through the perimeters of technology. If Gibson’s (1984) view of the future in *Neuromancer* becomes realized, then humans will constantly implode, interact, and mutate dramatically, in part, because of the interrelationships they form with advanced

technological machines. Such drama sounds far-fetched, but glimpses into the profound ramifications of technology on our everyday business, the import of failed computers systems, the brownouts, and the drama of an America Online breakdown suggest the power that technology has already brought into existence.

While cyberspace is a place where identity can be manipulated, the diversity of roles played out in cyberspace are not completely different from our actual, real-life identities. More specifically, the limits of identity are recreated on the Net. "Identity, after all, refers to the sameness between two qualities, in this case between a person and his or her persona" (Turkle, 1995, p. 12). Aspects of the Net foster the creation of multiple identities that differ from the real life persona. In addition, we frequently alter our real-life identities: we have a work identity; an identity at home; an identity among our peers. We consistently play out multiple roles in our daily lives, viewing each role as essentially real. However, in cyberspace, people are more likely to experiment with people they would not experiment with in real life. Fantasies, fears, and wishes are more likely to extend into cyberspace. Virtuality gives individuals greater psychological distance and moral detachment. As Turkle (1995) noted, "We are dwellers on the threshold between real and virtual, unsure of our footing, inventing ourselves as we go along" (p. 10). This freedom is made possible by the apparent invisibility and equality the Net proffers.

### **Equality vs. Privilege**

One hopes the Internet will blur all social and individual boundaries so that people can meet each other without the status attached to roles and income. Theoretically, at least, in cyberspace we have no gender, ethnicity, social status, or age; everyone starts out equally. The WWW breaks down all physical assumptions. An individual's traits and characteristics are conveyed through language alone. Those who idealize cyberspace use this notion to verify the Net will make the world more egalitarian; however, this is not necessarily the case. First, everyone is not surfing the Net. Second, those who do are demographically quite similar.

While roughly 73 million people surf the Net now, they are principally men—mostly highly educated men from North America and Western Europe with incomes in excess of \$50,000 (Research Spectrum, 1997). According to research conducted by the GVU Center (1997), 89% of Net users are men (as of the

end of May 1997.) A comparable research survey suggests that 30 to 35% of American Internet users are women (Cipoletti, 1997).

Over one half of the Internet's computers exist in the United States—roughly 30 million machines altogether. Western Europe houses roughly 1.4 million hosts (as of July 1995). Net users are typically young and well educated; the median age of Americans on the Web is 30.3; their European counterparts are slightly older—36.0 years old. Most are college educated (GVU Center, 1997).

Web users form a similar pattern; they are slightly older with a median age of 37. Half of all Web users are married. And their average income ranges from \$50,000 to \$60,000. In the United States the median household income (as of May 1997) was \$58,000. However, European users are often students and report lower incomes. Prodigy Web users were the richest subgroup with annual incomes between \$60,000 to \$75,000 (Cipoletti, 1997; GVU Center, 1997).

Nearly one third (30.3%) of the users are in a computer-related field. Many (24.5%) are educators. The rest are primarily self-employed, professionals, or managers. Students, or recent graduates, follow.

Research about Web users consistently suggests that education (more than any other factor) is the key to Internet participation (Bournellis, 1995; Wiggins, 1995). GVU Center's (1997) 7th Survey confirms this: over 52.3% of their respondents had completed a college or advanced degree.

Guess who's not surfing? Most women, the poorly educated, the illiterate, and people in developing nations who have neither the infrastructure nor the requisite literacy to participate. (Nearly one third of all the people in developing nations cannot read.) Presently, the Internet clearly favors some groups over others. Naturally, only those who have money to buy the hardware and software may access the Internet in the first place.

While the media claims that the Internet will enhance diversity, the Internet's users have much in common: cultural, ethnic, and gender homogeneity. While some futurists anticipate nearly equal amounts of men and women participating in the Net by the end of 1997 (Bournellis, 1995), it's likely these women will mirror the educational and income levels of their North American and Western European counterparts. In this sense, technology is aggravating today's forms of social inequality rather than forging a more egalitarian society.

Access not only excludes who communicates on-line, but relies on exclusionary jargon to keep them out. Magazines such as

*Wired* cater to the so-called "cyber yuppie." *Wired* constantly urges people to buy "better" hardware and software. Those with money for computer hardware, software, and telephone bills can create public messages and disseminate public art. Those without sufficient revenue listen to the hubbub on the sidelines.

*Wired* operates within a paradigm of ironic exclusion since it writes solely to the existing *digerati*—that is, the digital literate—even as it sends the message that cyberspace will positively aid the progress of humankind. One *Wired* editor was quoted as saying on-line service was "affordable" at a cost of as little as \$20 per month. What he did not mention was that people must spend an initial \$2,000 for a computer, as well as purchase a modem, software, and pay regular phone bills (as cited in Owens, 1996). Magazines such as *Wired* symbolize the problem: technology caters primarily to the monied elite.

Despite its press, the arrival of the Net signals a new form of exclusion, a new way of fractionalizing the universe. Though the Net is applauded for its potential for creating an unprecedented global perspective, a reverse pattern actually emerges. Under the guise of the New World Order, the privileged have found a new way to re-create a cultural space that is still sacrosanct. Today, the have-nots have been replaced by the know-nothings; the disenfranchised have become the disconnected. At a moment when cultural diversity and gender equity are tolerated, technological "advances" have concocted new fences made of fiber optic cables and silicon chips. The Net's arrival offers ideal venues for private conversations among the privileged.

### **Mall vs. Haven**

Today the Internet is enchanting because it puts cultural acts in the hands of all its participants—decentralizing media-based activities such as advertising, public speech, and other forms of cultural production. However, many corporations would prefer to convert the Internet to a giant shopping mall because it offers a marketing inroad into people's homes 24 hours a day.

When one surfs the Net, pages leap out with personal opinions, family photos, and advertisements for free and upcoming cultural and political events. All this access to free speech and free activities is heady. It feels exciting to chat with people of similar interests, cruise the hip pages, buy books that are unavailable except through Amazon.com. What could be bad about a venue that supports cultural activities, personal talk, and international access, and provides street maps

that teach us how to get somewhere accurately? Nothing really bad can happen to us on the Web if our confidentiality is intact, but such access raises subtler issues.

More information will inevitably be directed toward the expansion of capital spending. Easy access will probably raise the volume of consumer purchases to a brand-new level. This shift in economic structure is "causing every company to think far beyond 're-engineering' to transform[ing] itself" (Brook & Boal, 1995, p. xiii). Even this is not so bad.

But, if most users are drawn to sites that are the most innovative and, thus, take money to produce, maintain, and update, these sites will inevitably come from corporate powers. These advertisers will inevitably camouflage themselves, appearing as both sources of information and entertainment, to interest their target audiences. While consumer research is costly, a seductive Web page may provide a forum for an endless and relatively cheap focus group even though there is already some anecdotal evidence that Web pages devoted solely to shopping inevitably fail. As Stone (1995) stated in her book, *The War of Desire and Technology at the Close of the Mechanical Age*, two companies, The Source and Prodigy, were both interested in selling goods. The Source did not permit on-line conferencing; it went bankrupt. Prodigy, however, stayed in business by permitting people to be connected. "[Prodigy] found out quite early that the thing users found most interesting was being on-line" (p. 246).

Probably, cyberspace may form just another gateway for desires, another distraction from people's socioeconomic conditions, another Marxian de-centering. While advertisements will promise you can be all you want to be, this fulfillment will occur primarily through purchasing products to create an improved version of oneself, or taking on a new gender identity, or falsifying detracting facts about oneself. Is this problematic or just old news?

"Whatever is missing from our lives will be rectified by ever greater access to the stores of data and new forms of entertainment that companies big and small are eager to sell" (Brook & Boal, 1995, p. viii). Cyberspace, therefore, offers the illusion of empowerment. The more you own, the more freedom you have. However, this is an illusionary freedom just as the advertisement/consumption/happiness continuum is an illusionary freedom. While users enjoy limitless freedom, they are further bound to capitalism and their credit cards. What we exchange for this direct marketing into our homes is an unlimited exchange of fresh information, especially about

ourselves as corporations track our demographics and shopping preferences.

Even as capitalistic values urge us to work hard so we can buy better computers and leave the real world to enter a virtual one, we will be taken away from more "humane" or the "real experiences" of going into nature or interacting in the community.

Naturally, "none of the electronic technology would be here if not for their utility as pillars of the consuming society" (Saige, 1995, p. 67). According to Bob Stein, a CD-ROM pioneer:

What the upper class is trying to do is control the middle class with some form of virtual space, and control the lower class with force. Instead of having nice homes, cities that work, and clean subways, the middle class is going to get Virtual World and live in their computers. The really rich people are going to have the same physical objects they've always had except they're going to have more of them. Bill Gates is building a 25-million dollar mansion. He isn't building a virtual home, he's building a real home. (Owens, 1996, p. 32)

### Thus and So

While the media wants us to believe that the Internet will bring about instant, widespread social benefits, this is not likely. Technology can be used for progressive ends if its proponents insist on realizing what it now promises: forms of unexplored equality and unlimited opportunities for global and accessible communications. What's crucial to consider here is this: Will such a mega infrastructure—the electronic superhighway—actually enhance human conditions?

Ideally, the Internet will become a great source of ideas, feedback, opportunity, productive collaboration, interrelationships, and interactivity. This new medium is already changing the way we write notes at work, play on-line, and structure information. "Far more

than the old western frontier, the digital frontier is a place of recklessness, confusion, uncertainty, calamity, and danger" (Brook & Boal, 1995, p. xv). This is the bedrock dream America is based on: part terror, part possibility.

Henry David Thoreau foreshadowed the Net's limitations when he wrote: "Our inventions are wont to be pretty toys, which distract our attention from serious things. They are improved means to an unimproved end" (as cited in Moore, 1995, p. 201). Is it possible to enjoy this cybertoy and still reach an improved social end—new forms of access and equality? The future will let us know, but for now, let us offer these conclusions/admonitions. Admittedly, they are dreamy remarks and too-big comments, but perhaps worth saying.

1. Don't give cyberspace away to the highest bidder. A monopoly via Bill Gates seems likely. And that monopoly will affect the price of airline tickets, the curriculum at schools and universities, and inexpensive access to vital information.
2. Build infrastructures for the majority of the world, or the elite will simply be talking with themselves.
3. Make technology decipherable, even appealing, to people with varying levels of abilities, interests, and technological literacies.
4. Minute for minute, consider the value of time spent on-line versus off-line living. Eat a peach. Roll up your trousers on a beach. Talk about Michaelangelo.
5. And, despite this cautionary article, get on-line so everyone can bear witness to what evolves so we can forestall Orwellian nightmares. Let's discover the genuine social value of this allegedly utopian venue.

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